TITLE: A SYSTEM AND METHOD FOR
UNIQUELY IDENTIFYING PERSONS
INVENTORS: Donald M. Berlin, et al.
SERIAL NO.: Unassigned
DOCKET NO.: 1751.1001

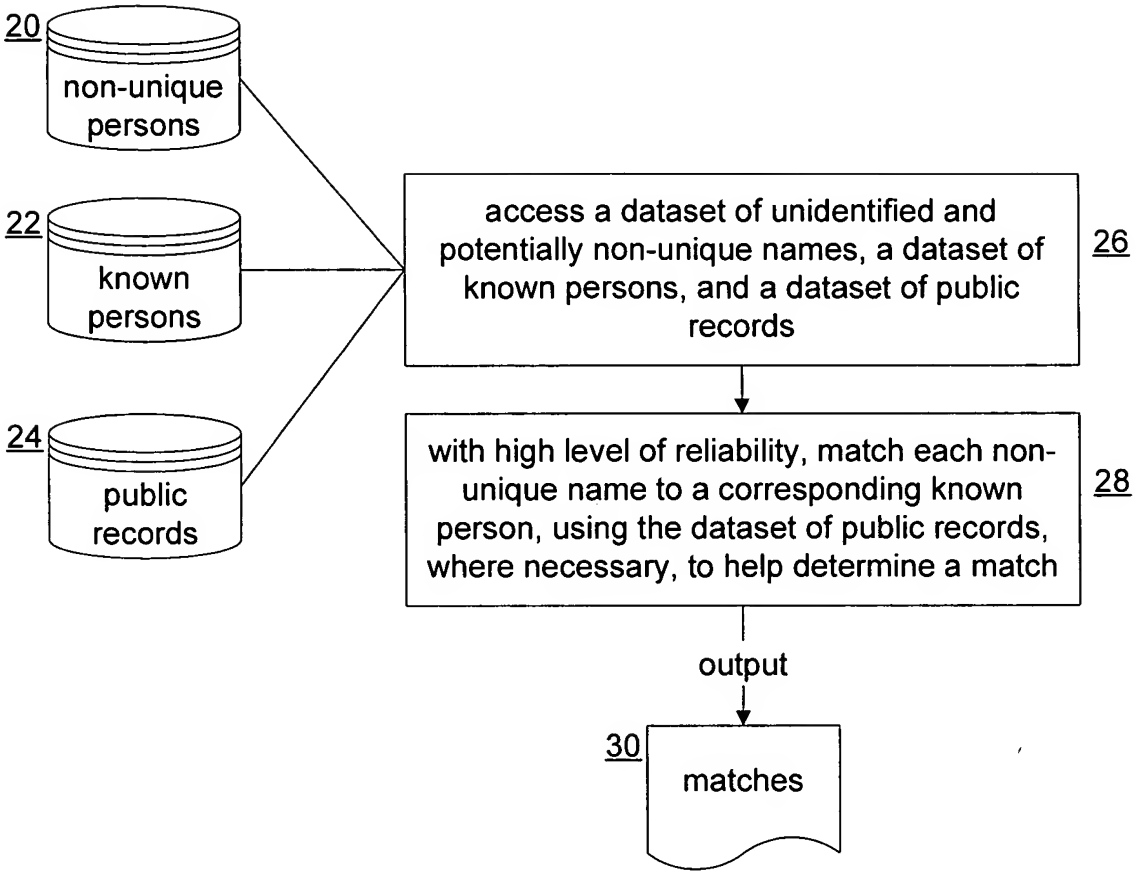

FIGURE 1

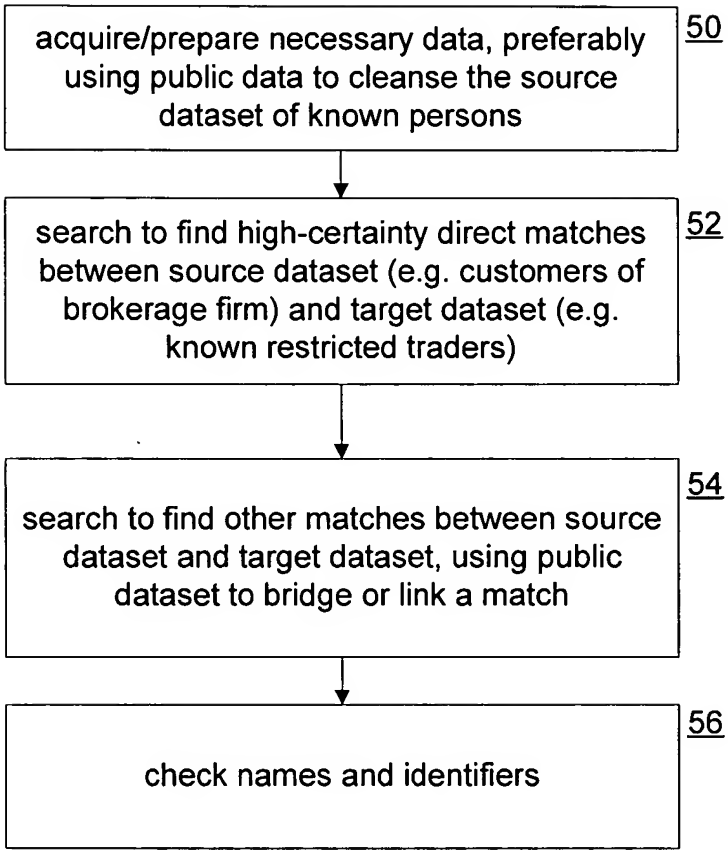
acquire/prepare necessary data, preferably using public data to cleanse the source dataset of known persons
50
search to find high-certainty direct matches between source dataset (e.g. customers of brokerage firm) and target dataset (e.g. known restricted traders)
52
search to find other matches between source dataset and target dataset, using public dataset to bridge or link a match
54
check names and identifiers
56

FIGURE 2

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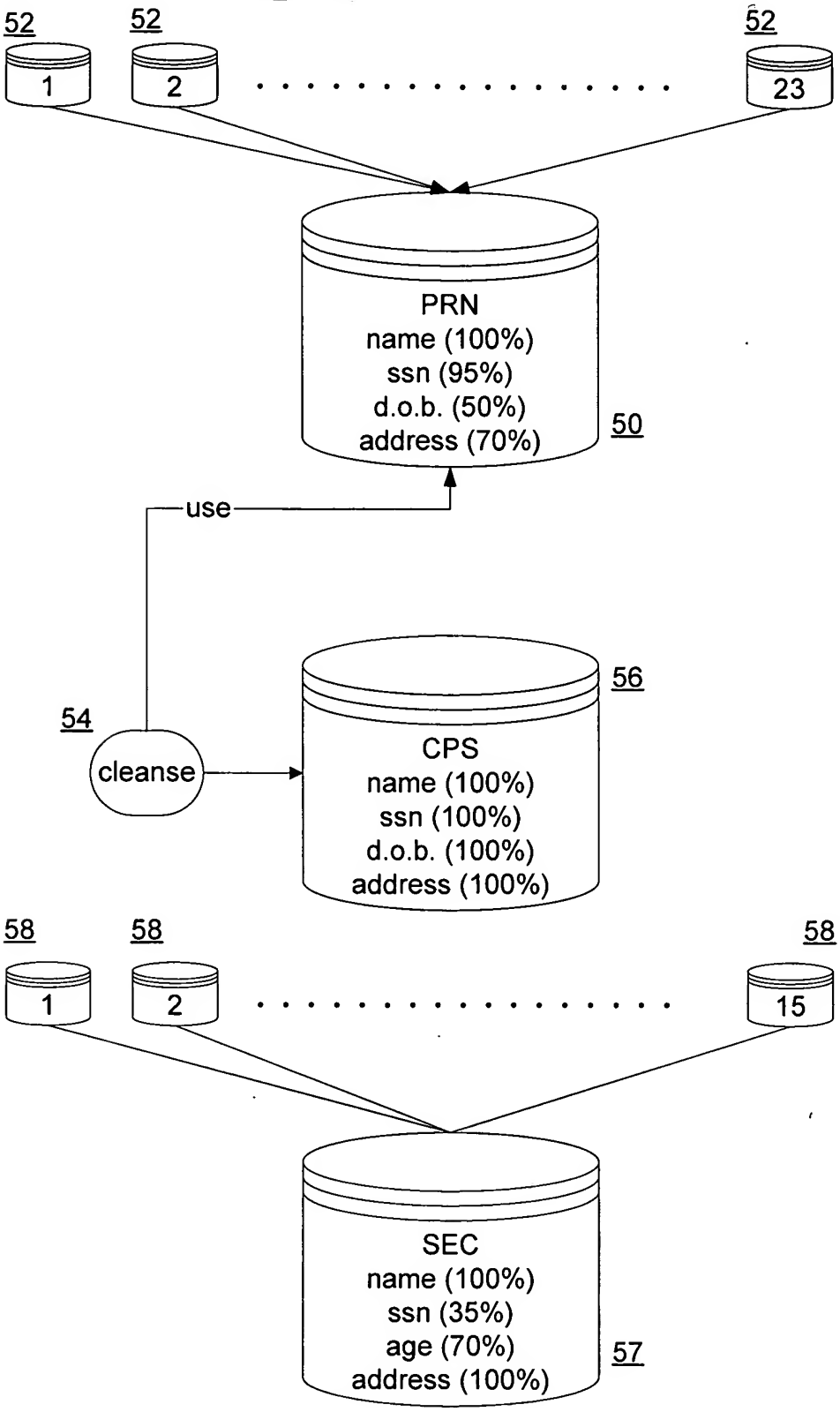

FIGURE 3

FIGURE 4A

Header File 100

Field	Field Description	Data Type	Max Width	Notes
1	File Date	char	8	20011002
2	Create Date	char	8	20011002
3	DCN	char	10	Document Control Number
4	Form Type	varchar	7	
5	Person ID	int	14	
6	Owner Full Name	varchar	60	
7	Address 1	char	40	
8	Address 2	varchar	40	
9	City	char	50	
10	State Code	char	2	
11	Postal Code	char	10	
12	Country Code	char	3	
13	Phone Number	char	18	
14	Company Name	varchar	60	
15	Security ID	decimal	11	
16	Ticker Symbol	char	6	
17	Cusip – Issuer	char	6	
18	Cusip – Issue	char	2	
19	Cusip – Check Digit	char	1	
20	Role Code 1	varchar	3	
21	Role Code 2	varchar	3	
22	Role Code 3	varchar	3	
23	Role Code 4	varchar	3	
24	SEC Receipt Date	char	8	20011002
25	Signature Date	char	8	20011002
26	Last Maintenance Date	char	8	20011002

FIGURE 4B

Table One File 104

Field	Field Name	Data Type	Width	Notes
1	File Date	char	8	20011002
2	Create Date	char	8	20011002
3	DCN	char	10	Doc Control Number
4	Sequence Number	smallint	3	
5	Form Type	char	7	
6	Person ID	int	14	
7	Owner Full Name	varchar	60	
8	Security ID	decimal	11	
9	Ticker Symbol	char	6	
10	Cusip - Issuer	char	6	
11	Cusip - Issue	char	2	
12	Cusip - Check Digit	char	1	
13	Company Name	varchar	60	
14	Role Code 01	char	3	
15	Role Code 02	char	3	
16	Role Code 03	char	3	
17	Role Code 04	char	3	
18	Transaction Code	char	2	
19	Acquistion/Disposition Flag	char	1	
20	Transaction Date	char	8	20011002
21	Transaction Price	money	20	
22	Ownership Type	char	1	
23	Number of Shares	decimal	14	
24	Resulting Shares Held	decimal	16	
25	Amendment Indicator	char	1	A = amended record
26	SEC Receipt Date	char	8	20011002
27	Signature Date	char	8	20011002
28	Last Maintenance Date	char	8	20011002
29	Cleanse Indicator	char	1	
30	Transaction Code (AR)	char	2	As-reported
31	Acquisition/Disposition Flag (AR)	char	1	As-reported
32	Transaction Price (AR)	money	20	As-reported
33	Transaction Date (AR)	char	8	As-reported
34	Option Sell Indicator	char	1	A, P, N, or null

FIGURE 4C

Table Two File 108

Field	Field Name	Data Type	Width	Notes
1	File Date	char	8	20011002
2	Create Date	char	8	20011002
3	DCN	char	10	Doc Control Number
4	Sequence Number	smallint	3	
5	Form Type	char	7	
6	Person ID	int	14	
7	Owner Full Name	varchar	60	
8	Security ID	decimal	11	
9	Ticker Symbol	char	6	
10	Cusip - Issuer	char	6	
11	Cusip - Issue	char	2	
12	Cusip - Check Digit	char	1	
13	Company Name	varchar	60	
14	Role Code 01	char	3	
15	Role Code 02	char	3	
16	Role Code 03	char	3	
17	Role Code 04	char	3	
18	Transaction Code	char	2	
19	Acq/Disp Flag	char	1	
20	Transaction Date	char	8	20011002
21	Derivative Type	char	5	
22	Exercise Date	char	8	
23	Expiration Date	char	8	
24	Number of Derivatives	decimal	14	
25	Underlying Sec Title	char	5	
26	Underlying Shares	decimal	14	
27	Conversn/Exer Price	money	20	
28	Underlying Mkt Price	money	20	
29	Resulting Derivs Held	decimal	16	
30	Ownership Type	char	1	
31	Amendment Indicator	char	1	A = amended record
32	SEC Receipt Date	char	8	20011002
33	Signature Date	char	8	20011002
34	Last Maint Date	char	8	20011002
35	Cleanse Indicator	char	1	
36	Trans Code (AR)	char	2	As-reported
37	Acquisition/Dispositio n Flag (AR)	char	1	As-reported
38	Transaction Date (AR)	char	8	20011002, As-reported

FIGURE 4D

Form 144 Proposed Sale File 112

Field	Field Description	Data Type	Width	Notes
1	File Date	char	8	20011002
2	Create Date	char	8	20011002
3	DCN	char	10	
4	Sequence Number	smallint	3	
5	Person ID	int	14	
6	Owner Full Name	varchar	60	
7	Security ID	decimal	11	
8	Ticker Symbol	char	6	
9	Cusip – Issuer	char	6	
10	Cusip – Issue	char	2	
11	Cusip – Check Digit	char	1	
12	Company Name	varchar	60	
13	Role Code 01	char	3	
14	Role Code 02	char	3	
15	Role Code 03	char	3	
16	Role Code 04	char	3	
17	Broker Name	varchar	60	
18	Proposed Number of Shares	decimal	16	
19	Market Value of Transaction	money	20	
20	Proposed Sale Date	datetime	8	20011002
21	Nature of Acquisition	varchar	50	
22	Amendment Indicator	char	1	A = amended record
23	SEC Receipt Date	char	8	20011002
24	Signature Date	char	8	20011002
25	Last Maintenance Date	char	8	20011002
26	Cleanse Indicator	char	1	
27	Market Value of Transaction (AR)	money	20	As-reported
28	Proposed Number of Shares (AR)	decimal	16	As reported
29	Proposed Sale Date (AR)	char	8	20011002, As-reported

FIGURE 4E

Individual Returns File 116

Field	ield Name	ype	Width	escription
1	Person Id	Int	N/A	Internal Person ID
2	Security Id	Dec	(11,0)	Internal Security ID
3	Average 3 Month Return Buys	Dec	(13,4)	Average 3 month buy return
4	Average 3 Month Return Sells	Dec	(13,4)	Average 3 month sell return
5	Average 6 Month Return Buys	Dec	(13,4)	Average 6 month buy return
6	Average 6 Month Return Sells	Dec	(13,4)	Average 6 month sell day
7	Buy Count	Int	N/A	Individual's number of historic buy decisions
8	Sell Count	Int	N/A	Individual's number of historic sell decisions

FIGURE 4F

Company File 120

Field	Field Description	Data Type	Width	Notes
1	Security id	decimal	11	
2	Company Number	char	10	
3	Ticker Symbol	char	6	
4	Company Name	varchar	60	
5	Sector Code	char	2	For Internal Use Only
6	Industry Code	char	2	For Internal Use Only
7	Cusip Issuer	char	6	
8	CUSIP ISSUE	CHAR	2	
9	CUSIP CHECK	CHAR	1	

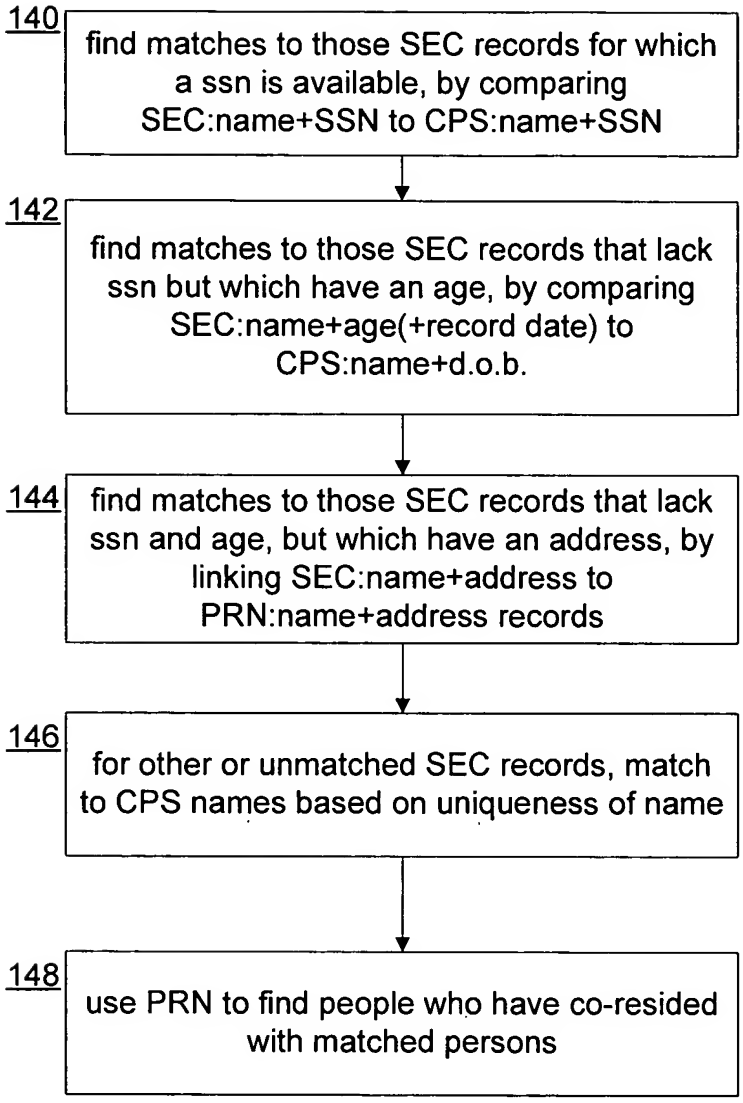
140
find matches to those SEC records for which a ssn is available, by comparing SEC:name+SSN to CPS:name+SSN
142
find matches to those SEC records that lack ssn but which have an age, by comparing SEC:name+age(+record date) to CPS:name+d.o.b.
144
find matches to those SEC records that lack ssn and age, but which have an address, by linking SEC:name+address to PRN:name+address records
146
for other or unmatched SEC records, match to CPS names based on uniqueness of name
148
use PRN to find people who have co-resided with matched persons

FIGURE 5

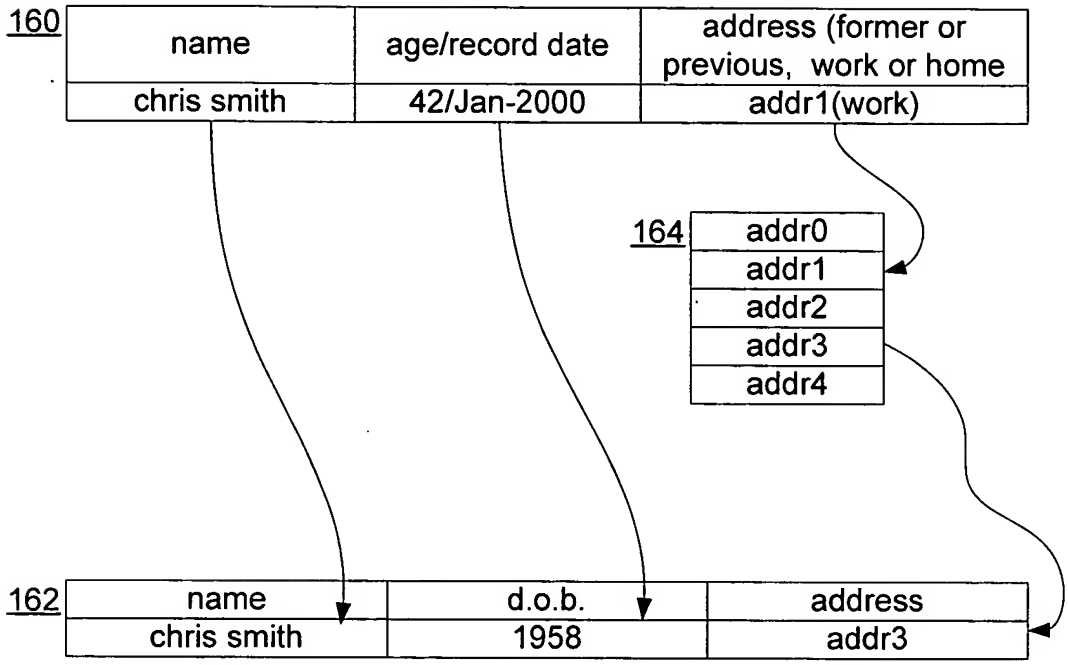
160
name
age/record date
address (former or previous, work or home
chris smith
42/Jan-2000
addr1(work)
164
addr0
addr1
addr2
addr3
addr4
162
name
d.o.b.
address
chris smith
1958
addr3

FIGURE 6

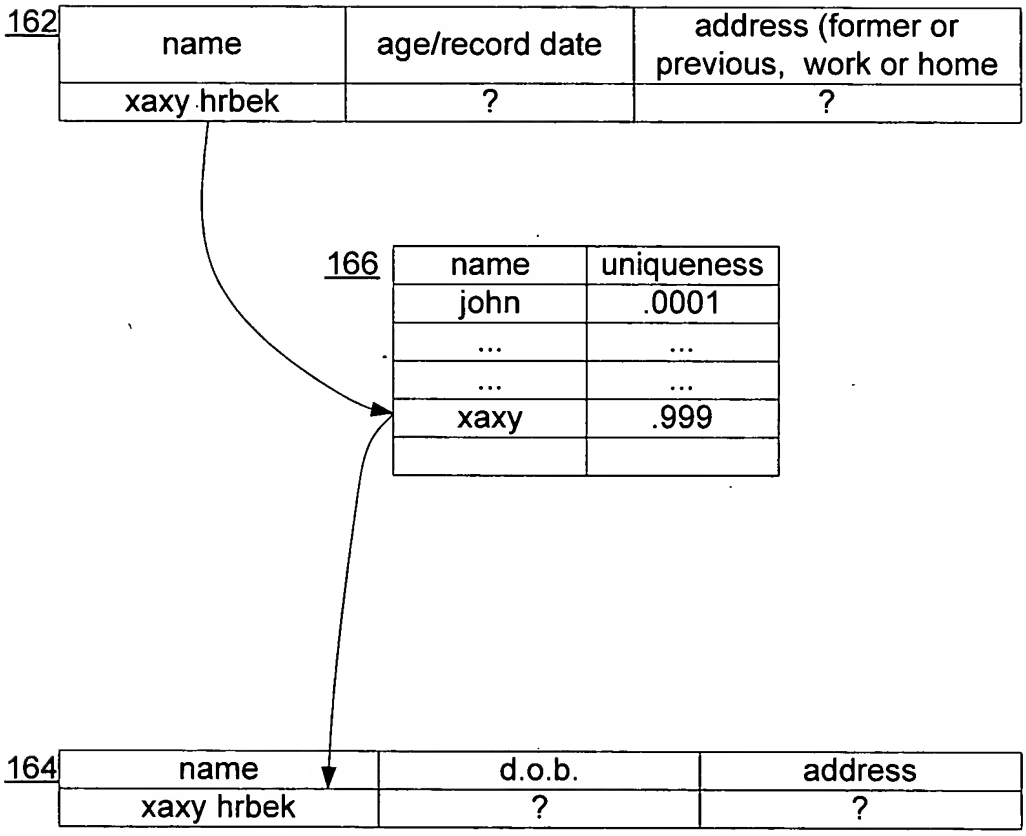
162
name
age/record date
address (former or previous, work or home
xaxy hrbek
?
?
166
name
uniqueness
john
.0001
...
...
...
...
xaxy
.999
164
name
d.o.b.
address
xaxy hrbek
?
?

FIGURE 7

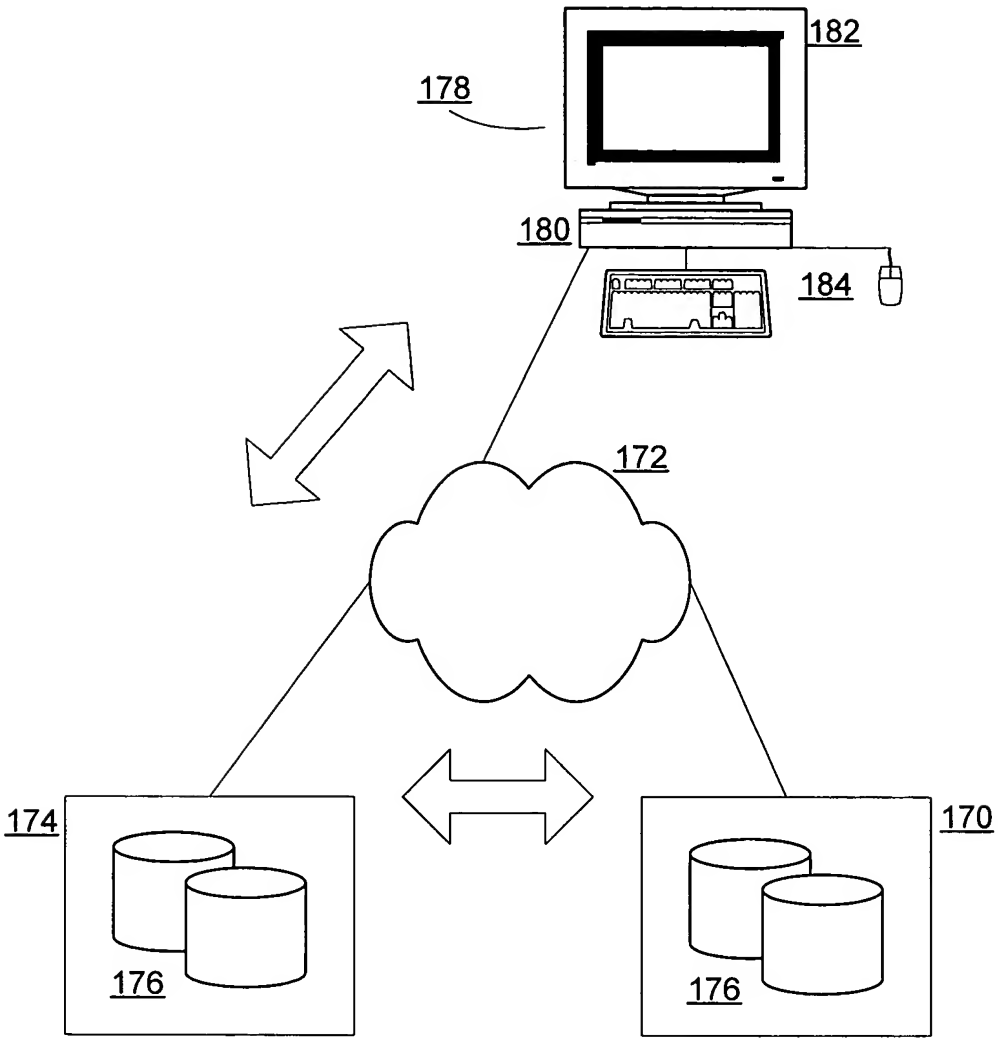

FIGURE 8